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7590 Lerner David Littenberg Krumholz & Mentlik 600 South Avenue West Westfield, NJ 07090				
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HOSSAIN, FARZANA E				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/807,804

**Applicant(s)**

NISHIO ET AL.

**Examiner**

FARZANA HOSSAIN

**Art Unit**

2424

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C2)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/20/2009 has been entered.

### ***Response to Amendment***

2. This office action is in response to communications filed 07/20/2009. Claims 1, 10, 29 are amended. Claims 2-9 and 11-28 have been previously presented. Claims 30-33 are cancelled.

### ***Response to Arguments***

3. Applicant's arguments filed 06/05/2009 have been fully considered but they are not persuasive.

Regarding Claims 1, 10 and 29, the applicant argues that the prior art does not disclose advertising information including a multiple of keys associated with an

advertisement, the keys defining at least one receiver state that will trigger display of the advertisement, and the keys including an indication of the type of condition for displaying the advertisement and an indication of the value of the condition for displaying the advertisement.

In analogous art, Boylan discloses the advertisement information including a multiple of keys associated with an advertisement, the keys defining at least one receiver state that will trigger display of the advertisement (Pages 6-7, paragraph 0078-0081) and the keys including an indication of the type of condition for displaying the advertisement or a tag is specifically genre tag (Page 6, paragraph 0078) and an indication of the value of the condition for displaying the advertisement or a specific genre such as sports, comedy or movies (Page 6, paragraph 0078). The examiner would like to note that the applicant's specification filed 01/14/2002 discloses that a key indicating a value such as genre and a value such as sports, soccer (Pages 58-59, paragraph 0229).

### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 10-17 and 23-28 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a system, the body of the claims recites sections. The applicant's specification includes language

such as "Each section of the receiver is controlled by the CPU 67. The CPU 67 is constituted by a control section 69 for controlling each section...All the processing of these sections is carried out through software." Therefore, the section limitations can be considered to be only software which is not a "process", "machine" or "article of manufacture".

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 5, 10, 12, 14, 16-21, 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wugofski (US 6,201,538) in view of Lemmons et al (US 2003/0051243 and hereafter referred to as "Lemmons"), Pietraszak et al (US 6,990,677 and hereafter referred to as "Pietraszak") and Boylan et al (US 2002/0166120 and hereafter referred to as "Boylan").

Regarding Claim 1, Wugofski discloses a method for transmitting data from a broadcasting station to a first audio/video receiver made by a first manufacturer (Column 2, lines 43-62, Column 8, lines 44-55, Column 7, lines 33-37, Column 1, lines 51-55) and a second audio/video receiver made by a second manufacturer which is

different from the first manufacturer (Column 2, lines 43-62, Column 8, lines 44-55, Column 7, lines 33-37, Column 1, lines 51-55), the method comprising:

generating program guide information (PG) representative of programs to be supplied to the receivers or data from the electronic program guide (EPG) database (Column 6, lines 13-42);

generating a control signal (Figure 3C, Figures 7a-b, Column 7, lines 34-47, Column 8, lines 44-55);

and transmitting the PG information to the first and the second receivers along with the control signal (Column 6, lines 1-64, Figures 7a, 7b), the control signal operable to control a screen layout on a display of both the first audio/video receiver and the second audio/video receiver the program guide information are displayed at the same relative location on the display of the both the first audio video receiver and the second audio/ video receiver (Column 2, lines 43-62, Column 6, lines 1-64, Figure 3C, Figures 7a-b, Column 7, lines 34-47, Column 8, lines 44-55).

Wugofski is silent on obtaining advertisement (ad) information; and the ad information to the first and the second receivers along with the control signal, receiver such that the advertisement information and the program guide information are displayed at the same relative location on the display of the both the first audio video receiver and the second audio/ video receiver and the program guide information being generated according to program guide information received from multiple broadcast systems and program guide information received from a non broadcast source, advertising information including a multiple of keys associated with an advertisement,

the keys defining at least one receiver state that will trigger display of the advertisement, and the keys including an indication of the type of condition for displaying the advertisement and an indication of the value of the condition for displaying the advertisement.

In analogous art, Lemmons discloses a method of transmitting data from a television distribution facility or headend to a first receiver and a second receiver (Figure 1, 22), the method comprising: obtaining advertisement information (Page 4, paragraph 0046), generating PG data representative of programs to be supplied to the receiver (Page 2, paragraph 0025, Figure 5), the PG data is transmitted with HTML information/markup language documents, which necessarily includes control signals, that generate display screens (Page 2, paragraphs 0025, 0026), transmitting the program guide information and ad information to the receiver with the HTML information/markup language documents are operable to control the screen layout on both receivers such that ad information and PG information are displayed in the same relate locations for both the receivers (Page 4, paragraphs 0045, 0046, Page 1, paragraph 0013). Lemmons discloses transmitting PG data on a fixed time or periodic basis (Page 2, paragraph 0028).

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Wugofski to obtain ad information (Page 4, paragraph 0046, Page 2, paragraph 0025); and transmitting the ad information to the first and the second receivers along with the control signal (Page 4, paragraphs 0045, 0046), such that the advertisement information and the program guide information are displayed at

the same relative location on the display of the both the first audio video receiver and the second audio/ video receiver (Page 4, paragraphs 0045, 0046, Page 1, paragraph 0013) as taught by Lemmons in order to provide a viewer with a convenient way to change user screens (Page 1, paragraphs 0004) as disclosed by Lemmons.

Wugofski and Lemmons are silent on the program guide information being generated according to program guide information received from multiple broadcast systems and program guide information received from a non broadcast source, and advertising information including a multiple of keys associated with an advertisement, the keys defining at least one receiver state that will trigger display of the advertisement, and the keys including an indication of the type of condition for displaying the advertisement and an indication of the value of the condition for displaying the advertisement.

In analogous art, Pietraszak discloses the PG information being generated (Figure 3, 41, 22) according to PG information received from multiple broadcast systems (Figure 3, 74, 76) and PG information received from a non-broadcast source (Figure 3, 75).

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the combination to include the PG information being generated (Figure 3, 41, 22) according to PG information received from multiple broadcast systems (Figure 3, 74, 76) and PG information received from a non-broadcast source (Figure 3, 75) as taught by Pietraszak in order to provide program guide from multiple sources so that destination devices can receive information in



multiple formats and data that can be tailored to a user's tastes (Column 1, lines 26-67, Column 2, lines 1-6) as disclosed by Pietraszak.

Wugofski, Lemmons and Pietraszak are silent on advertising information including a multiple of keys associated with an advertisement, the keys defining at least one receiver state that will trigger display of the advertisement, and the keys including an indication of the type of condition for displaying the advertisement and an indication of the value of the condition for displaying the advertisement.

In analogous art, Boylan discloses the advertisement information including a multiple of keys associated with an advertisement, the keys defining at least one receiver state that will trigger display of the advertisement (Pages 6-7, paragraph 0078-0081) and the keys including an indication of the type of condition for displaying the advertisement or a tag is specifically genre tag (Page 6, paragraph 0078) and an indication of the value of the condition for displaying the advertisement or a specific genre such as sports, comedy or movies (Page 6, paragraph 0078).

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the combination to include the advertisement information including a multiple of keys associated with an advertisement, the keys defining at least one receiver state that will trigger display of the advertisement (Pages 6-7, paragraphs 0078-0081) and the keys including an indication of the type of condition for displaying the advertisement or a tag is specifically genre tag (Page 6, paragraph 0078) and an indication of the value of the condition for displaying the advertisement or a specific genre such as sports, comedy or movies (Page 6, paragraph 0078) as taught by Boylan

in order to provide program guide from with advertisements suitable to the viewer such as a child (Page 6, paragraph 0078) as disclosed by Boylan, including a child who should not be viewing ads for adult programming.

Furthermore, in *KSR International Co. Teleflex Inc.*, 82 USPQ2d 1385, 1395 (2007), the Court found that if all the claimed elements are known in the prior art then one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yield predictable results to one of ordinary skill in the art at the time of the invention.

Regarding Claim 2, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 1. Wugofski discloses that the control signal is described by HTML pseudo code or script (Column 4, lines 47-577-16, Columns 56-61, Column 6, lines 1-64). Lemmons discloses markup language documents (Page 4, paragraphs 0045, 0046). Script is well known in the art to be a type of computer code than can be directly executed by a program that understands the language in which the script is written.

Regarding Claim 3, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 1. Lemmons discloses that the PG data transmitted to interpret markup language including XML (Page 2, paragraphs 0025, 0026).

Regarding Claim 5, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 1. Lemmons discloses that the HTML information operable to control a screen layout (Page 4, paragraphs 0045, 0046) by identifying the advertisement elements or advertisement elements from the display element attributes

to display together with the PG information (Page 4, paragraphs 0045, 0046) and the display processing section or control circuitry processes the control signal including HTML information or markup language documents to carry out processing (Page 3, paragraph 0037) to display the ad information together with the program guide information (Page 4, paragraph 0046).

Regarding Claim 10, Wugofski discloses a first receiving device made by a first manufacturer and a second receiving device made by a second manufacturer or receiving devices made by different manufactures (Figure 1, Column 2, lines 43-62, Column 8, lines 44-55, Column 1, lines 51-55. Column 7, lines 33-37) for receiving a broadcast signal (column 4, lines 6-7) including video and audio signals (Figure 4A, Figure 5a, Column 2, lines 32-62, Column 4, lines 6-15, Column 8, lines 28-30, 34-40), PG information including a control signal operable to control a screen layout on a display device (Figure 3, Figures 7a, 7b), each of the receiving devices comprising:

- a receiving section for receiving the broadcast signal (Column 4, lines 6-15); and
- a display processing section or processor (Column 3, lines 60-61) as the processor will process information or carries out the display processing of a PG based on the screen layout indicated by the control signal included in the PG information such that the PG information is displayed at the same relative location on the display of both receiving devices (Column 2, lines 43-62, Column 6, lines 1-64, Figure 3C, Figures 7a-b, Column 7, lines 34-47, Column 8, lines 44-55).

Wugofski is silent on the receiving devices receiving advertisement information; an extracting section for extracting the PG information from the broadcast and the control signal included in the PG information such that the ad information PG information is displayed at the same relative location on the display of both receiving devices and the PG information being generated according to PG information received from multiple broadcast systems and PG information received from a non-broadcast source, and the advertisement information including a multiple of keys associated with an advertisement, the keys defining at least one receiver state that will trigger display of the advertisement; the keys defining at least one receiver state that will trigger display of the advertisement, and the keys including an indication of the type of condition for displaying the advertisement and an indication of the value of the condition for displaying the advertisement.

Lemmons discloses a first receiver and a second receiver or receiving devices (Figure 1, 22) receiving advertisement information (Page 4, paragraph 0046, Page 2, paragraph 0025); an extracting section for extracting the PG information from the broadcast signal or control circuitry to extract the information as the equipment extracts data (Page 2, paragraph 0028, Page 3, paragraph 0036-0037) and the control signal included in the PG information such that the ad information PG information is displayed at the same relative location on the display of both receiving devices (Page 4, paragraphs 0045, 0046, Page 1, paragraph 0013).

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Wugofski to include receiving devices (Figure 1, 22)

receiving advertisement information (Page 4, paragraph 0046, Page 2, paragraph 0025); an extracting section for extracting the PG information from the broadcast signal or control circuitry to extract the information as the equipment extracts data (Page 2, paragraph 0028, Page 3, paragraph 0036-37) and the control signal included in the PG information such that the ad information PG information is displayed at the same relative location on the display of both receiving devices (Page 4, paragraphs 0045, 0046, Page 1, paragraph 0013) as taught by Lemmons in order to provide a viewer with a convenient way to change user screens (Page 1, paragraphs 0004) as disclosed by Lemmons and to allow a broadcaster to control the screen layout (Column 1, lines 56-60) as disclosed by Lemmons.

Wugofski and Lemmons are silent on the program guide information being generated according to program guide information received from multiple broadcast systems and program guide information received from a non broadcast source, and advertising information including a multiple of keys associated with an advertisement, the keys defining at least one receiver state that will trigger display of the advertisement, and the keys including an indication of the type of condition for displaying the advertisement and an indication of the value of the condition for displaying the advertisement.

In analogous art, Pietraszak discloses the PG information being generated (Figure 3, 41, 22) according to PG information received from multiple broadcast systems (Figure 3, 74, 76) and PG information received from a non-broadcast source (Figure 3, 75).

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the combination to include the PG information being generated (Figure 3, 41, 22) according to PG information received from multiple broadcast systems (Figure 3, 74, 76) and PG information received from a non-broadcast source (Figure 3, 75) as taught by Pietraszak in order to provide the program guide from multiple sources so that destination devices can receive information in multiple formats and data that can be tailored to a user's tastes (Column 1, lines 26-67, Column 2, lines 1-6) as disclosed by Pietraszak.

Wugofski, Lemmons and Pietraszak are silent on advertising information including a multiple of keys associated with an advertisement, the keys defining at least one receiver state that will trigger display of the advertisement, and the keys including an indication of the type of condition for displaying the advertisement and an indication of the value of the condition for displaying the advertisement.

In analogous art, Boylan discloses the advertisement information including a multiple of keys associated with an advertisement, the keys defining at least one receiver state that will trigger display of the advertisement (Pages 6-7, paragraph 0078-0081); and the keys including an indication of the type of condition for displaying the advertisement or a tag is specifically genre tag (Page 6, paragraph 0078) and an indication of the value of the condition for displaying the advertisement or a specific genre such as sports, comedy or movies (Page 6, paragraph 0078).

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the combination to include the advertisement information

including a multiple of keys associated with an advertisement, the keys defining at least one receiver state that will trigger display of the advertisement (Pages 6-7, paragraphs 0078-0081), the keys including an indication of the type of condition for displaying the advertisement or a tag is specifically genre tag (Page 6, paragraph 0078) and an indication of the value of the condition for displaying the advertisement or a specific genre such as sports, comedy or movies (Page 6, paragraph 0078) as taught by Boylan in order to provide program guide from with advertisements suitable to the viewer such as a child (Page 6, paragraph 0078) as disclosed by Boylan, including a child who should not be viewing ads for adult programming.

Furthermore, the KSR Court found that if all the claimed elements are known in the prior art then one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yield predictable results to one of ordinary skill in the art at the time of the invention. 82 USPQ2d at 1395.

Regarding Claim 12, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 10. Lemmons discloses that the HTML information operable to control a screen layout (Page 4, paragraphs 0045, 0046) by identifying the advertisement elements or advertisement elements from the display element attributes to display together with the PG information (Page 4, paragraphs 0045, 0046) and the display processing section or control circuitry processes the control signal including HTML information or markup language documents to carry out processing (Page 3,

paragraph 0037) to display the ad information together with the program guide information (Page 4, paragraph 0046).

Regarding Claim 14, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 10. Lemmons discloses that the PG information is transmitted a plurality of times a day such as once every hour (Page 2, paragraph 0028). Lemmons discloses that the receiving device has a storage section for receiving and storing the PG information when it is transmitted (Page 3, paragraph 0033, Figure 2, 31).

Regarding Claim 16, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 10. Lemmons discloses that the microprocessor and control circuitry that displays the programming information (Page 3, paragraph 0037) and that the programming information is stored (Figure 2, 31, Page 3, paragraph 0033). It is necessarily included that the processor or control circuitry operates to access or retrieve the PG information as PG information is displayed which meets the limitation of a retrieval processing section.

Regarding Claim 17, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 10. Lemmons discloses storing program data in writeable optical storage device, a disk drive, or any other digital storage (Figure 2, 31, Page 3, paragraph 0033). Wugofski discloses ROM (Column 3, lines 63-65). The combination of Wugofski and Lemmons allows the program data to be stored in a storage device that will maintain storage without power.

Regarding Claim 18, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 1. Wugofski discloses the control signal or pseudo code is operable



to control the screen layout by identifying the PG information to display (Figure 4a, Figure 7a). Lemmons discloses the control signal is or markup language documents are operable to control the screen layout by identifying the PG information to display (Page 4, paragraphs 0045-0046).

Regarding Claim 19, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 1. Wugofski disclose the control signal is operable to control the screen layout by filtering content of PG information such as displaying only favorite channels such that display device only displays a portion of the PG information transmitted such as displaying only an overlay (Column 8, lines 43-55).

Regarding Claim 20, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 1. Lemmons discloses that markup language documents has information to select a condition information (Figure 6a, Figure 6b), which includes channels, programs, and advertisements or promotions (Figure 6a, Figure 6b).

Regarding Claim 21, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 1. Lemmons discloses that PG information transmitted includes channels, program descriptions, program category, and advertisements (Page 2, paragraph 0025, Page 4, paragraph 0046, Figure 5).

Regarding Claim 23, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 10. Wugofski discloses the control signal or pseudo code is operable to control the screen layout by identifying the PG information to display (Figure 4a, Figure 7a). Lemmons discloses the control signal is or markup language

documents are operable to control the screen layout by identifying the PG information to display (Page 4, paragraphs 0045-0046).

Regarding Claim 24, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 10. Wugofski disclose the control signal is operable to control the screen layout by filtering content of PG information such as displaying only favorite channels such that display device only displays a portion of the PG information transmitted such as displaying only an overlay (Column 8, lines 43-55).

Regarding Claim 25, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 24. Wugofski discloses that the user selects the information to view on an EPG or the user of receiving device sets the condition information as there are favorites for channels (Column 8, lines 43-55) and by the broadcaster who decides what to be displayed (Column 2, lines 43-62). Lemmons discloses that the broadcaster decides the location of the PG information (Figure 7).

8. Claims 4, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wugofski in view of Lemmons, Pietraszak and Boylan as applied to claim 1 and 10 above, and further in view of Chaney (US 5,841,433).

Regarding Claim 4, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 1. Lemmons discloses extracting section for extracting the PG information from the broadcast signal or control circuitry to extract the information as the equipment extracts data (Page 2, paragraph 0028, Page 3, paragraphs 0036-0037). Wugofski, Lemmons, Pietraszak and Boylan are silent on a carousel system. Chaney

discloses transmitting PG information in a carousel system or every 30 minutes and decoder or extracting section are operable to resolve a carousel structure of the carousel system (Column 5, lines 66-67, Column 6, lines 1-67, Column 8, lines 9-21). Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the combination to include transmitting PG information in a carousel system or every 30 minutes and decoder or extracting section are operable to resolve a carousel structure of the carousel system (Column 5, lines 66-67, Column 6, lines 1-67, Column 8, lines 9-21) as taught by Chaney in order to provide the most up to date program guide if there are unexpected changes including cases of sporting events running overtime (Column 2, lines 9-37, Column 4, lines 3-8) as disclosed by Chaney.

Regarding Claim 8, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 1. Lemmons discloses that the program guide information is transmitted a plurality of times a day such once an hour (Page 2, paragraph 0028), the PG information including schedules of a plurality of programs (Page 2, paragraph 0025) includes the schedules of the program (Column 13, lines 55-62). Wugofski, Lemmons, Pietraszak and Boylan are silent on the when there is a change in the schedule of at least one of the programs; the PG information of only at least one program is continuously transmitted. In analogous art, Chaney discloses that the PG information is transmitted a plurality of times a day, the PG information including schedules of a plurality of programs, if there is a change to the program guide information of any programs, the changes will be transmitted (Column 3, lines 66-67, Column 4, lines 1-15). Therefore, it would have been obvious to one of ordinary skill at the time the

invention was made to modify the combination to include if there is a change to the program guide information of any programs, the changes will be transmitted (Column 3, lines 66-67, Column 4, lines 1-15) as taught by Chaney in order to provide the most up to date program guide if there are unexpected changes including cases of sporting events running overtime (Column 2, lines 9-37, Column 4, lines 3-8) as disclosed by Chaney.

Regarding Claim 11, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 10. Lemmons discloses extracting section for extracting the PG information from the broadcast signal or control circuitry to extract the information as the equipment extracts data (Page 2, paragraph 0028, Page 3, paragraphs 0036-0037). Wugofski, Lemmons, Pietraszak and Boylan are silent on a carousel system. Chaney discloses transmitting PG information in a carousel system or every 30 minutes and decoder or extracting section are operable to resolve a carousel structure of the carousel system (Column 5, lines 66-67, Column 6, lines 1-67, Column 8, lines 9-21). Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the combination to include transmitting PG information in a carousel system or every 30 minutes and decoder or extracting section are operable to resolve a carousel structure of the carousel system (Column 5, lines 66-67, Column 6, lines 1-67, Column 8, lines 9-21) as taught by Chaney in order to provide the most up to date program guide if there are unexpected changes including cases of sporting events running overtime (Column 2, lines 9-37, Column 4, lines 3-8) as disclosed by Chaney.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wugofski in view of Lemmons and Pietraszak as applied to claim 1 above, and further in view of Arai et al (US 2004/0221307 and hereafter referred to as "Arai").

Regarding Claim 6, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 1. Wugofski, Lemmons, Pietraszak and Boylan are silent on the PG information is from a plurality of different broadcasting systems. Arai discloses that the PG information is from a plurality of broadcast service providers or systems (Page 2, paragraph 0019). Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the combination to include program information from different broadcasting systems (Page 2, paragraph 0019) as taught by Arai in order to provide different features or services unlike existing electronic program guides (EPG) (Page 1, paragraph 0012) as disclosed by Arai.

10. Claims 7, 13, 22, 26, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wugofski in view of Lemmons, Pietraszak and Boylan as applied to claims 1 and 10 above, and further in view of Hendricks et al (US 5,990,927 and hereafter referred to as "Hendricks").

Regarding Claim 7, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 1. Wugofski, Lemmons, Pietraszak and Boylan are silent on the cable headend performing encryption. Hendricks discloses generating a program control information signal or a program control signal/STTCIS operable to control a display design or menu template including the data of the schedule and description of

the programs or generating program guide (PG) information including a control signal (Column 6, lines 45-47, lines 59-67, Column 13, lines 42-55, lines 64-65) to display to the subscriber or viewer on a display device (Column 13, line 44-55, Figure 3, 222). Hendricks discloses that signals are transmitted and that video signals and program control signals (PG information) are received at the STT (Column 6, lines 41-48). Hendricks discloses that the cable headend's signal processor performs necessary encryption of signals in order to prepare the signals for a part of the PG information to be encrypted prior to transmission (Column 9, lines 7-9, 29-30). Hendricks also describes that STT has a decrypting section (Figure 4, 600) in order to decrypt any encrypted PG information. Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the combination to include processor performs necessary encryption of signals in order to prepare the signals for a part of the PG information to be encrypted prior to transmission (Column 9, lines 7-9, 29-30) and STT has a decrypting section in order to decrypt any encrypted PG information (Figure 4, 600) as taught by Hendricks in order to provide programming information to only the authorized viewers.

Regarding Claim 13, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 10. Wugofski, Lemmons, Pietraszak and Boylan are silent on the cable headend performing encryption. Hendricks discloses generating a program control information signal or a program control signal/STTCIS operable to control a display design or menu template including the data of the schedule and description of the programs or generating program guide (PG) information including a control signal

(Column 6, lines 45-47, lines 59-67, Column 13, lines 42-55, lines 64-65) to display to the subscriber or viewer on a display device (Column 13, line 44-55, Figure 3, 222). Hendricks discloses that signals are transmitted and that video signals and program control signals (PG information) are received at the STT (Column 6, lines 41-48). Hendricks discloses that the cable headend's signal processor performs necessary encryption of signals in order to prepare the signals for a part of the PG information to be encrypted prior to transmission (Column 9, lines 7-9, 29-30). Hendricks also describes that STT has a decrypting section (Figure 4, 600) in order to decrypt any encrypted PG information. Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the combination to include processor performs necessary encryption of signals in order to prepare the signals for a part of the PG information to be encrypted prior to transmission (Column 9, lines 7-9, 29-30) and STT has a decrypting section in order to decrypt any encrypted PG information (Figure 4, 600) as taught by Hendricks in order to provide programming information to only the authorized viewers.

Regarding Claim 22, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 5. Wugofski, Lemmons and Pietraszak are silent on advertisement information is associated with condition information operable to filter a portion of the advertisement information for displaying on the display device. Hendricks discloses that the advertisement information has information to select advertisements in order to display whether it is due to condition information for targeted advertisements for particular viewers (Column 34, lines 49-51) or a particular advertisement for a specific

program (Column 13, lines 63-65, Column 14, lines 23-30). Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the combination to include the advertisement information has information to select advertisements in order to display whether it is due to condition information for targeted advertisements for particular viewers (Column 34, lines 49-51) or a particular advertisement for a specific program (Column 13, lines 63-65, Column 14, lines 23-30) as taught by Hendricks in order to provide targeted advertisements to viewers (Column 34, lines 49-51) as disclosed by Hendricks which can gain more revenue for broadcasters as more advertisers will want to buy time to advertise to customers who are interested in their products.

Regarding Claim 26, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 16. Wugofski, Lemmons, Pietraszak and Boylan are silent on the user profile. Hendricks discloses that the PG information that is displayed or retrieved is based on the user profile (Column 34, lines 26-33). Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the combination to include PG information that is displayed or retrieved is based on the user profile (Column 34, lines 26-33) as taught by Hendricks in order to provide to the viewers programming information so that they can make their selection efficiently (Column 4, lines 1-12) as disclosed by Hendricks and providing them with EPG data.

Regarding Claim 27, Wugofski, Lemmons, Pietraszak, Boylan and Hendricks disclose all the limitations of Claim 26. Wugofski discloses favorite channels (Column 5, lines 49-51). Hendricks discloses that the personal profile of the user comprises a



channel preference, a preference on the length of program, and a genre preference (Figure 16a, Column 34, lines 53 –67, Column 35, lines 1-10).

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wugofski in view of Lemmons, Lemmons, Pietraszak, Boylan and Chaney as applied to claim 8 above, and further in view of Suzuki (US 5,790,170).

Regarding Claim 9, Wugofski, Lemmons, Pietraszak, Boylan and Chaney disclose all the limitations of Claim 8. Wugofski, Lemmons, Pietraszak, Boylan and Chaney are silent on that a transmission schedule to transmit all the PG information is transmitted. Suzuki discloses that the distribution center or cable television station transmits the transmission schedule (Abstract). Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the combination to include a transmission schedule (Abstract) as taught by Suzuki in order to provide efficient use of the network (Column 3, lines 1-6) as disclosed by Suzuki.

12. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wugofski in view of Lemmons, Pietraszak and Boylan as applied to claim 14 above, and further in view of Suzuki and Cuccia (US 6,337,719).

Regarding Claim 15, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 14. Wugofski, Lemmons, Pietraszak and Boylan are silent on the transmission schedule is included in the broadcast signal or that the receiving device has a power control section for controlling the power source in accordance to the

transmission schedule. Suzuki discloses that the distribution center or cable television station transmits the transmission schedule (Abstract). Suzuki does not teach about a power control section in the receiving device. Cuccia discloses that if the receiving apparatus (device) is in power off mode that the apparatus has controlling means or power control section to power the receiving apparatus so that EPG or PG information can be transmitted according to its schedule (Column 2, lines 21-27, 50-63 and Column 2, lines 40-55, 60-61). Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the combination to include a transmission schedule (Abstract) as taught by Suzuki in order to provide efficient use of the network (Column 3, lines 1-6) as disclosed by Suzuki. Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the combination to include a power control section to control the power source in accordance with the transmission schedule (Column 2, lines 21-27, 50-63 and Column 2, lines 40-55, 60-61) as taught by Cuccia in order to have up to date information without having to transmit information in advance (Column 1, lines 57-62) as disclosed by Cuccia.

13. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wugofski in view of Lemmons, Pietraszak and Boylan as applied to claim 17 above, and further in view of Ellis (US 6,820,278).

Regarding Claim 28, Wugofski, Lemmons, Pietraszak and Boylan disclose all the limitations of Claim 17. Wugofski, Lemmons, Pietraszak are silent that the initial set of program guide information is stored at a time of shipment from a factory. Ellis discloses

that the set top box or terminal can be programmed at the time of manufacture at a warehouse prior to distribution to comprise of PG application (Column 2, lines 28-39, Column 5, lines 54-67, Column 6, lines 1-7). Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the combination to include stored PG information at the time of shipment in a warehouse (Column 2, lines 28-39, Column 5, lines 54-67, Column 6, lines 1-7) as taught by Ellis in order to provide a cooperative environment for an interactive television system (Column 2, lines 1-4) as disclosed by Ellis.

14. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arai in view of Wugofski, Lemmons, Pietraszak and Boylan.

Regarding Claim 29, Arai discloses an apparatus with a program table collection/storage or database to receive a plurality of program specific information (PSI) tables (Page 16, paragraphs 0239, 0245). Arai discloses that there is an input (Figure 9, 41) and that the apparatus comprises of service information (SI) tables (Pages 16-17, paragraphs 0238, 0245). Arai discloses that the apparatus also receives a plurality of PSI and SI tables so that there are different versions collected or an updated table can be identified from the collection of tables (a change processor to identify the changed information) (Pages 16-17, paragraph 0245). Arai discloses that there is a table generator or program guide (PG) information is generated from any changes in updated tables (Page 16, paragraphs 0245-0246).

Arai is silent on the control signal to control a screen layout, and a transmitter operable to transmit PG information and the control signal to a first receiver made by a first manufacturer and a second receiver made by a second manufacturer, the control signal operable to control the display of the first receiver and the second receiver such that the advertisement information and the PG information are displayed at the same relative locations on the display of both receivers and the PG information being generated by according to PG information received from multiple broadcast systems and PG information received from a non-broadcast source and the advertisement information including a multiple of keys associated with an advertisement, the keys defining at least one receiver state that will trigger display of the advertisement, the keys defining at least one receiver state that will trigger display of the advertisement, and the keys including an indication of the type of condition for displaying the advertisement and an indication of the value of the condition for displaying the advertisement.

Wugofski discloses a broadcaster or transmitter transmitting data to a first audio/video receiver made by a first manufacturer (Column 2, lines 43-62, Column 8, lines 44-55) and a second audio/video receiver made by a second manufacturer which is different from the first manufacturer (Column 2, lines 43-62, Column 8, lines 44-55, Column 1, lines 51-55), transmitting program guide information or data from the electronic program guide (EPG) database (Column 6, lines 13-42); generating a control signal which controls a screen layout on a display device (Figure 3C, Figures 7a-b, Column 7, lines 34-47, Column 8, lines 44-55); and transmitting the PG information to the first and the second receivers along with the control signal (Column 6, lines 1-64,

Figures 7a, 7b), the control signal operable to control a screen layout on a display of both the first audio/video receiver and the second audio/video receiver the program guide information are displayed at the same relative location on the display of the both the first audio video receiver and the second audio/ video receiver (Column 2, lines 43-62, Column 6, lines 1-64, Figure 3C, Figures 7a-b, Column 7, lines 34-47, Column 8, lines 44-55).

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Arai to include transmitter transmitting data to a first audio/video receiver made by a first manufacturer (Column 2, lines 43-62, Column 8, lines 44-55) and a second audio/video receiver made by a second manufacturer which is different from the first manufacturer (Column 2, lines 43-62, Column 8, lines 44-55, Column 1, lines 51-55), generating a control signal which controls a screen layout on a display device (Figure 3C, Figures 7a-b, Column 7, lines 34-47, Column 8, lines 44-55); and transmitting the PG information to the first and the second receivers along with the control signal (Column 6, lines 1-64, Figures 7a, 7b), the control signal operable to control a screen layout on a display of both the first audio/video receiver and the second audio/video receiver the program guide information are displayed at the same relative location on the display of the both the first audio video receiver and the second audio/ video receiver (Column 2, lines 43-62, Column 6, lines 1-64, Figure 3C, Figures 7a-b, Column 7, lines 34-47, Column 8, lines 44-55) as taught by Wugofski in order to allow a broadcaster to control the screen layout (Column 1, lines 56-60) as disclosed by Wugofski.

Arai, Wugofski and Lemmons are silent on the program guide information being generated according to program guide information received from multiple broadcast systems and program guide information received from a non broadcast source, advertising information including a multiple of keys associated with an advertisement, the keys defining at least one receiver state that will trigger display of the advertisement, and the keys including an indication of the type of condition for displaying the advertisement and an indication of the value of the condition for displaying the advertisement.

Lemmons discloses a television distribution facility or headend transmitting data to a first receiver and a second receiver (Figure 1, 22), transmitting PG data representative of programs to be supplied to the receiver (Page 2, paragraph 0025, Figure 5), the PG data is transmitted with HTML information/markup language documents, which necessarily includes control signals, that generate display screens (Page 2, paragraphs 0025, 0026), transmitting the program guide information and ad information to the receiver with the HTML information/markup language documents are operable to control the screen layout on both receivers such that ad information and PG information are displayed in the same relate locations for both the receivers (Page 4, paragraphs 0045, 0046, Page 1, paragraph 0013). Lemmons discloses including EPG information that is in a standard format and EPG information that is associated with a display design determined by at least one broadcasting station or content producer (Page 4, paragraph 0046, Page 2, paragraph 0025).

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the combination to include transmitting the program guide information and ad information to the receiver with the HTML information/markup language documents are operable to control the screen layout on both receivers such that ad information and PG information are displayed in the same relate locations for both the receivers (Page 4, paragraphs 0045, 0046, Page 1, paragraph 0013) including EPG information that is in a standard format and EPG information that is associated with a display design determined by at least one broadcasting station or content producer (Page 4, paragraph 0046, Page 2, paragraph 0025) as taught by Lemmons in order to provide a viewer with a convenient way to change user screens (Page 1, paragraphs 0004) as disclosed by Lemmons.

In analogous art, Pietraszak discloses the PG information being generated (Figure 3, 41, 22) according to PG information received from multiple broadcast systems (Figure 3, 74, 76) and PG information received from a non-broadcast source (Figure 3, 75).

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the combination to include the PG information being generated (Figure 3, 41, 22) according to PG information received from multiple broadcast systems (Figure 3, 74, 76) and PG information received from a non-broadcast source (Figure 3, 75) as taught by Pietraszak in order to provide program guide from multiple sources so that destination devices can receive information in

multiple formats and data that can be tailored to a user's tastes (Column 1, lines 26-67, Column 2, lines 1-6) as disclosed by Pietraszak.

Arai, Wugofski, Lemmons and Pietraszak are silent on advertising information including a multiple of keys associated with an advertisement, the keys defining at least one receiver state that will trigger display of the advertisement, and the keys including an indication of the type of condition for displaying the advertisement and an indication of the value of the condition for displaying the advertisement.

In analogous art, Boylan discloses the advertisement information including a multiple of keys associated with an advertisement, the keys defining at least one receiver state that will trigger display of the advertisement (Pages 6-7, paragraph 0078-0081) and the keys including an indication of the type of condition for displaying the advertisement or a tag is specifically genre tag (Page 6, paragraph 0078) and an indication of the value of the condition for displaying the advertisement or a specific genre such as sports, comedy or movies (Page 6, paragraph 0078).

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify the combination to include the advertisement information including a multiple of keys associated with an advertisement, the keys defining at least one receiver state that will trigger display of the advertisement (Pages 6-7, paragraphs 0078-0081) and the keys including an indication of the type of condition for displaying the advertisement or a tag is specifically genre tag (Page 6, paragraph 0078) and an indication of the value of the condition for displaying the advertisement or a specific genre such as sports, comedy or movies (Page 6, paragraph 0078) as taught by Boylan



in order to provide program guide from with advertisements suitable to the viewer such as a child (Page 6, paragraph 0078) as disclosed by Boylan, including a child who should not be viewing ads for adult programming.

Furthermore, the KSR Court found that if all the claimed elements are known in the prior art then one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yield predictable results to one of ordinary skill in the art at the time of the invention. 82 USPQ2d at 1395.

### ***Conclusion***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FARZANA HOSSAIN whose telephone number is (571)272-5943. The examiner can normally be reached on Monday 7:30 am to 1:30 pm, Tuesday 7:30 am to 2:30 pm and Wednesday to Friday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/FARZANA HOSSAIN/  
Examiner, Art Unit 2424

September 11, 2009